Maths- Y11H

MAGHULL HIGH SCHOOL – CURRICULUM MAP



HALF TERM 1 SEPT - OCT	Week 2 w/b 9 th Sept	Week 3 w/b 16 th Sept	Week 4 w/b 23 rd Sept	Week 5 w/b 30 th Sept	Week 6 w/b 7 th Oct	Week 7 w/b 14 th Oct	Week 8 w/b 21 st Oct			
TOPIC (S)	Algebra: Further quadratics, rearranging formulae and	Algebra: Further quadratics, rearranging formulae and	Inequalities	Direct and Inverse Proportion	Direct and Inverse Proportion	Vectors	Vectors			
	identities	identities								
Knowledge & Skills	Algebra: Further quadratics, rearranging formulae and identities									
development	Algebra: Further quadratics, rearranging formulae and identities • simplify and manipulate algebraic expressions (including those involving surds) by: • expanding products of two or more binomials • factorising quadratic expressions of the form x ² + bx + c, including the difference of two squares • factorising quadratic expressions of the form x ² + bx + c • simplifying expressions involving sums, products and powers, including the laws of indices • understand and use standard mathematical formulae • rearrange formulae to change the subject • know the difference between an equation and an identity • argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments to include proofs • where appropriate, interpret simple expressions as functions with inputs and outputs • interpret the reverse process as the 'inverse function' • interpret the succession of two variable(s) • solve linear inequalities in one or two variable(s) • solve quadratic inqualities in one or two variable(s) • solve problems involving direct and inverse proportion, including graphical and algebraic representations • understand that X is inversely proportional to Y is equivalent to X is proportional to 1/y • construct and interpret egraphs that illustrate direct and inverse proportion • construct and interpret egraphs that illustrate direct and inverse propor									

Assessment /	Topic assessments	Self-assessment	Homework	Formative teacher assessment - verbal	Retrieval practice					
Feedback		sheets								
Opportunities										
Cultural Capital	Use of algebra to solve real life problems involving widely used formulae									
	Application of proportionality in real life problems including science									
	Discussion of the use of vectors is real life including science and computing									
SMSC / Promoting	Willingness to participate in, and respond to mathematical opportunities. Use of social skills in different contexts, including working and									
British Values	socialising with pupils from different religious, ethnic and socio-economic backgrounds.									
(Democracy, Liberty, Rule of										
Law, Tolerance & Respect)										
Reading	Mathematics in the Simpsons, What's the point of maths? Murderous Maths, Marvellous Maths, Launch a rocket into space, Humble Pi.									
opportunities										
Key Vocabulary	Equation Expressio	n Identity Inequality	/ Formula Binomial	Polynomial Simplify Expand Factorise	Coefficient Subject Inequality					
	Less than More tha	n Variable Solution	n set Proportionality	Direct Inverse Vectors Direction Magn	itude Scalar Parallel Collinear					
Digital Literacy	Microsoft Excel, DESMOS, Geogebra									
Careers	Architecture, Team Leader, Construction, Chef, Medicine									